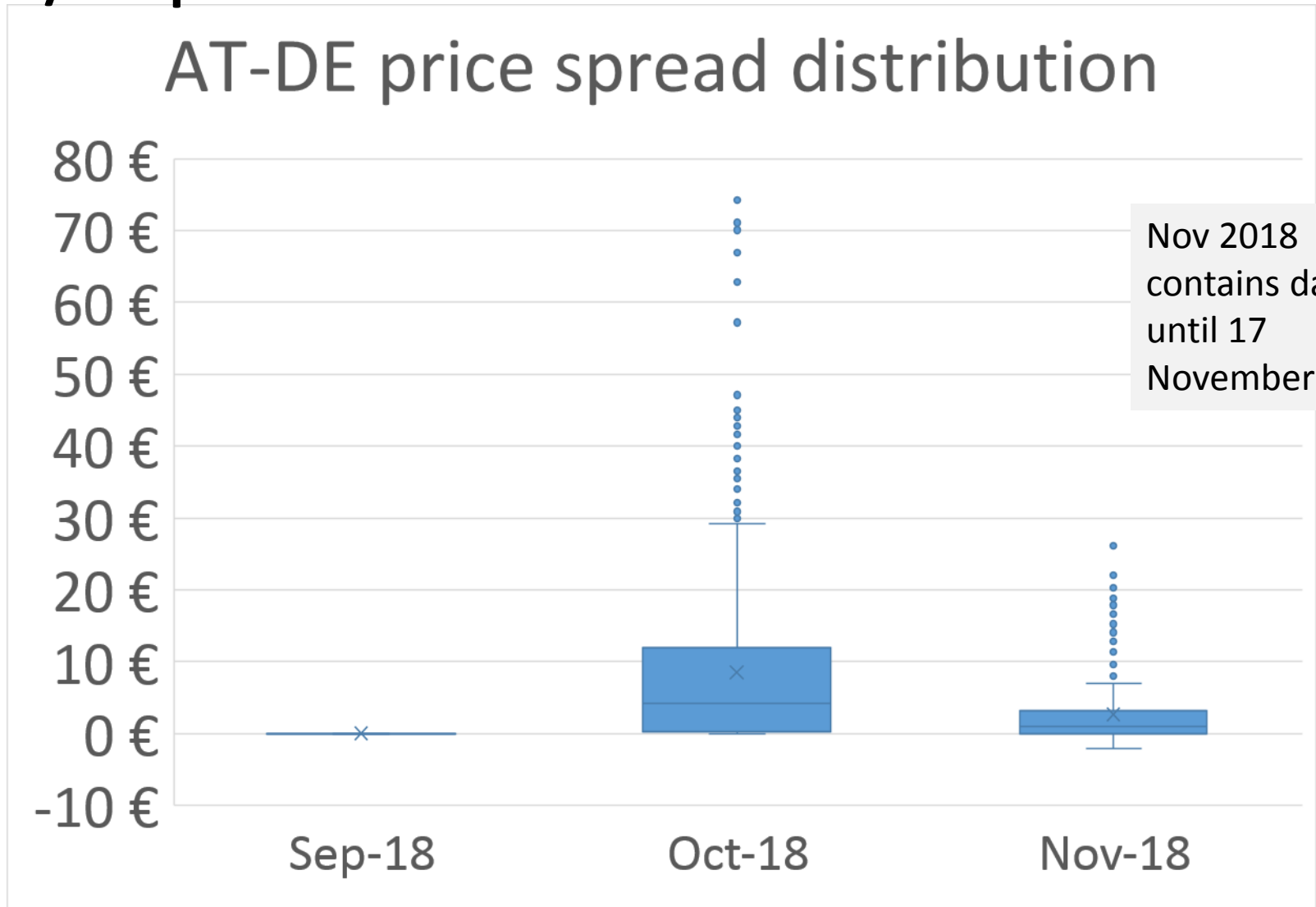




Status update on DE/AT split and PCR Operational Indicators

15th MESC, 5th December 2018

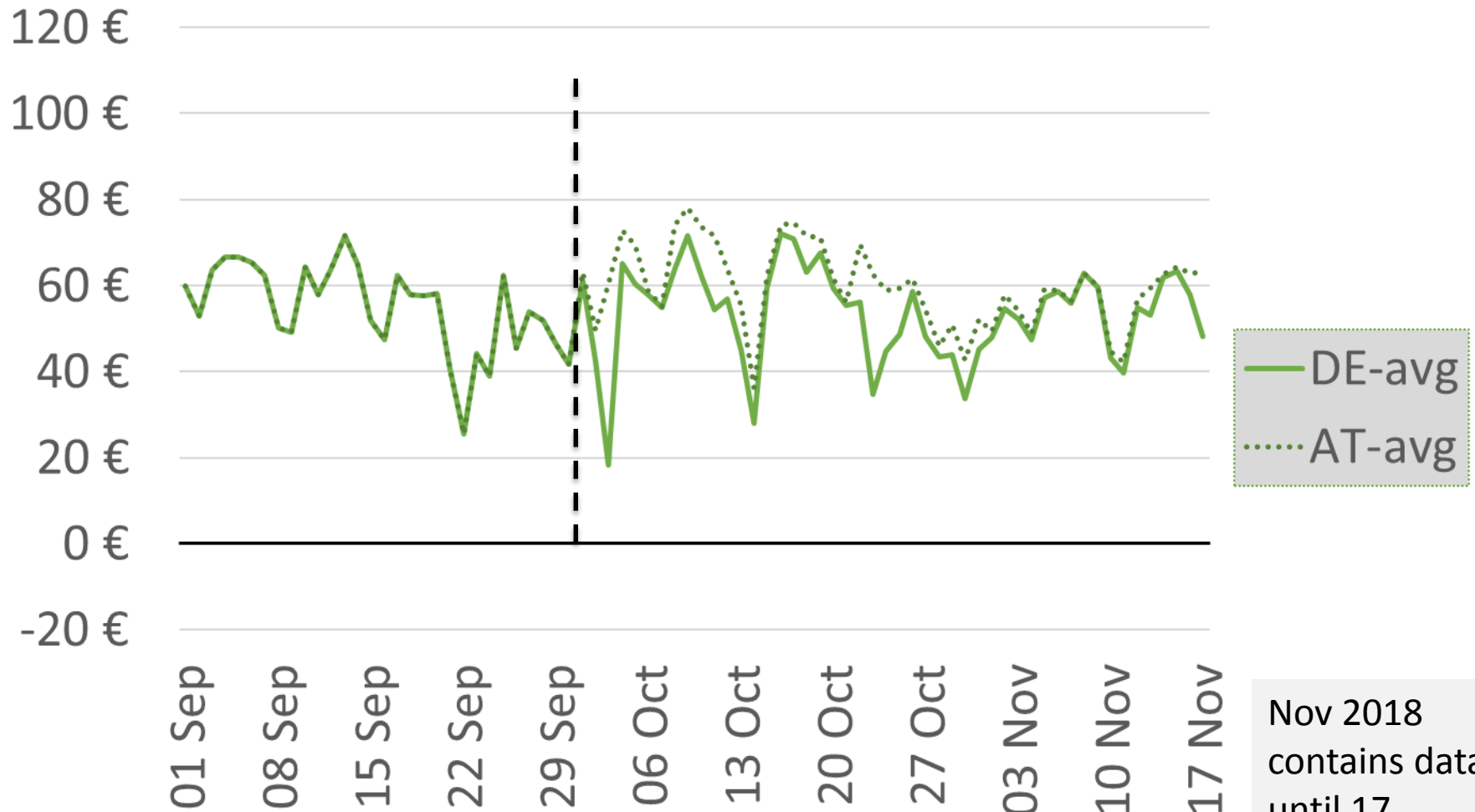
DE/AT split



Spread on new AT-DE border emerges with split

DE/AT split

average hourly prices per day

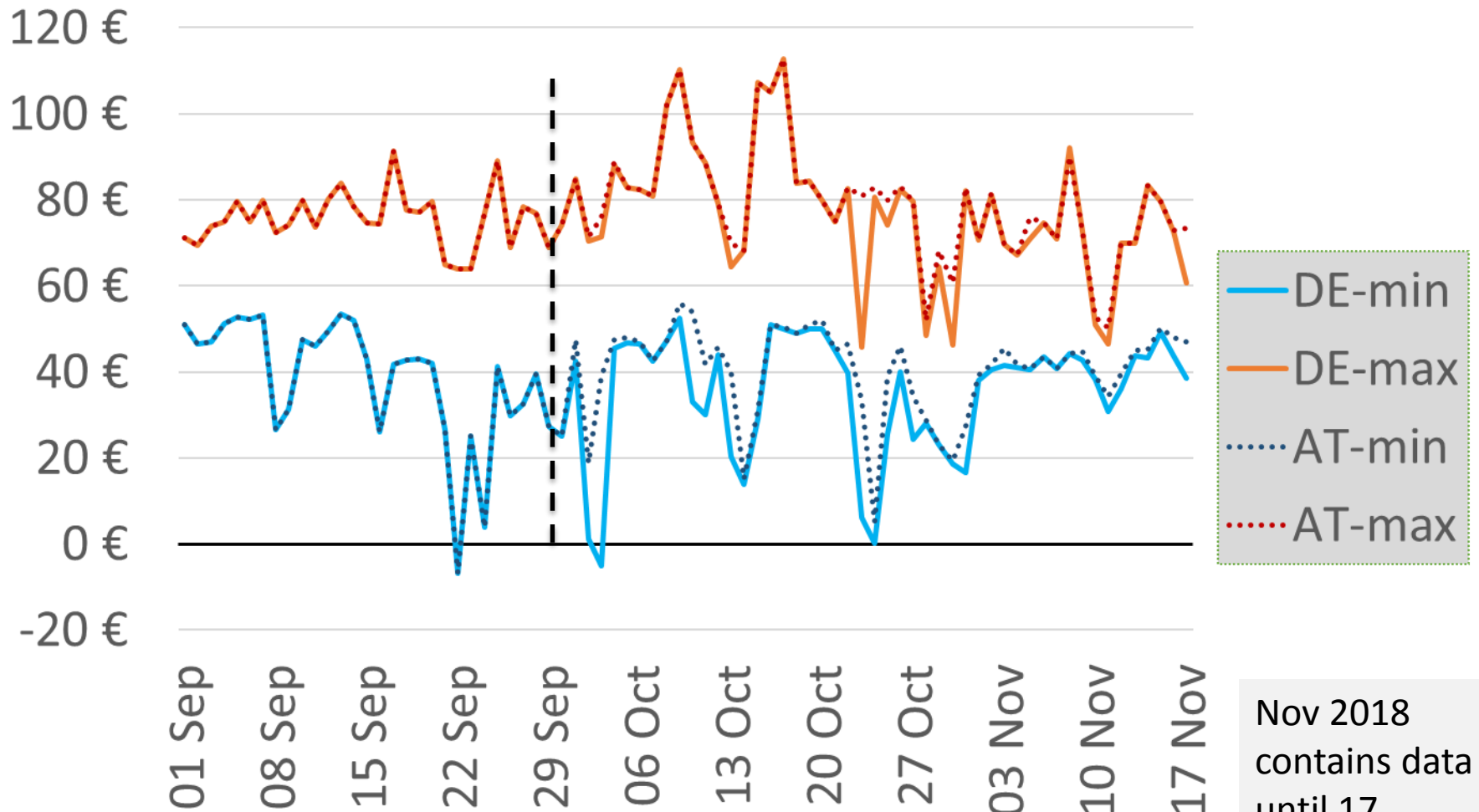


DE sees more extreme minimum prices, AT sees more extreme maximum prices

Nov 2018
contains data
until 17
November

DE/AT split

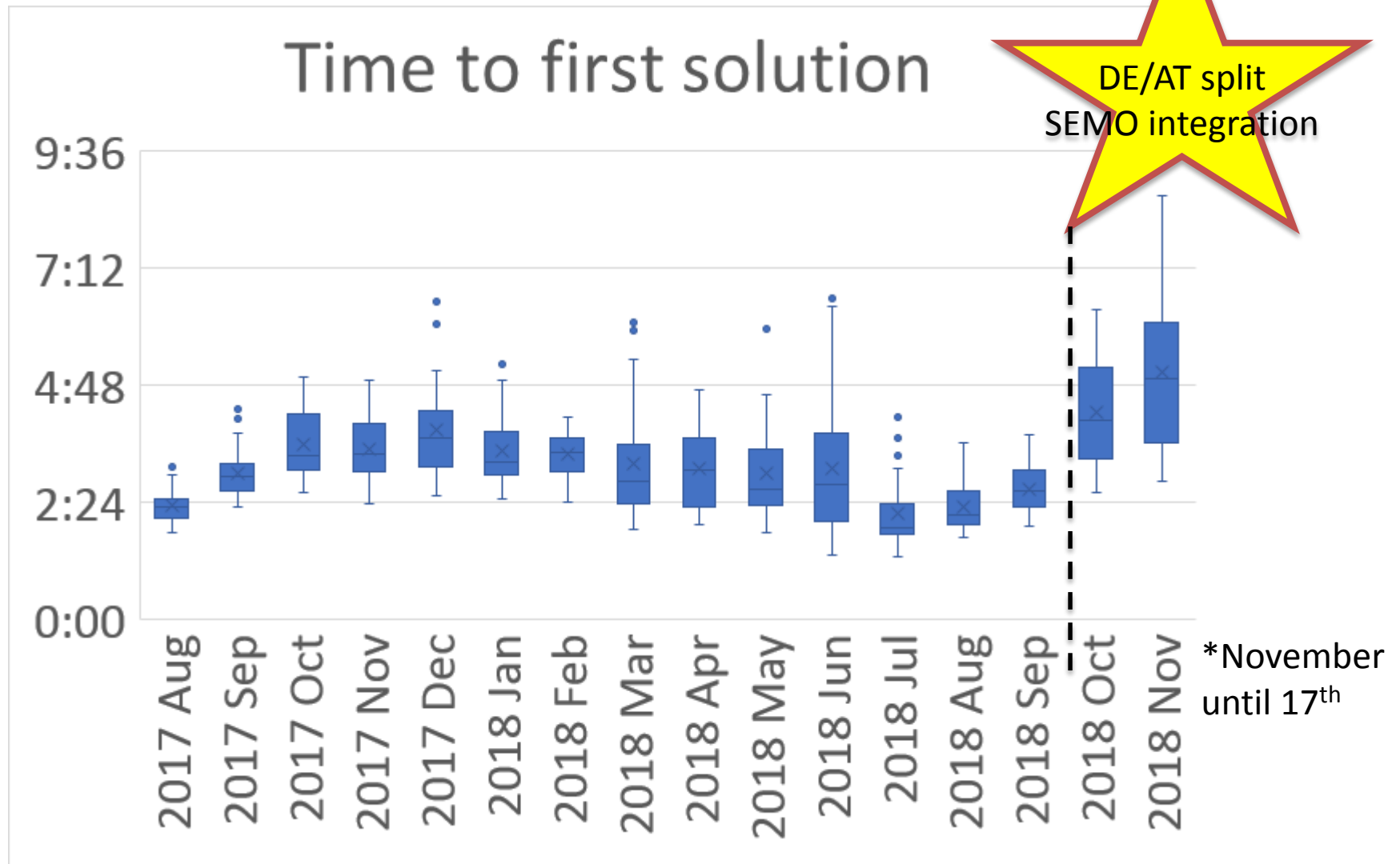
min/max hourly prices per day



DE sees more extreme minimum prices, AT sees more extreme maximum prices

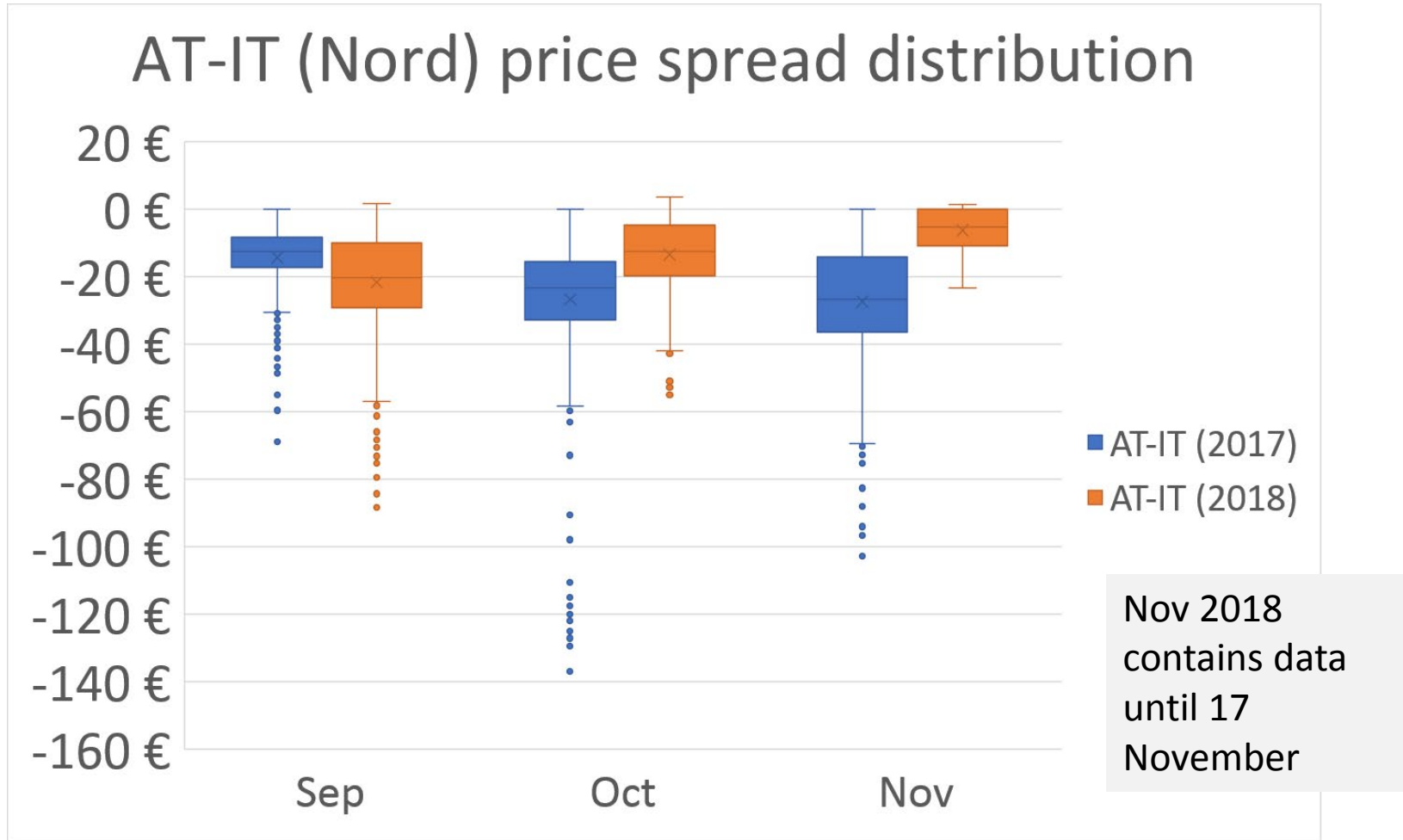
Nov 2018 contains data until 17 November

DE/AT split



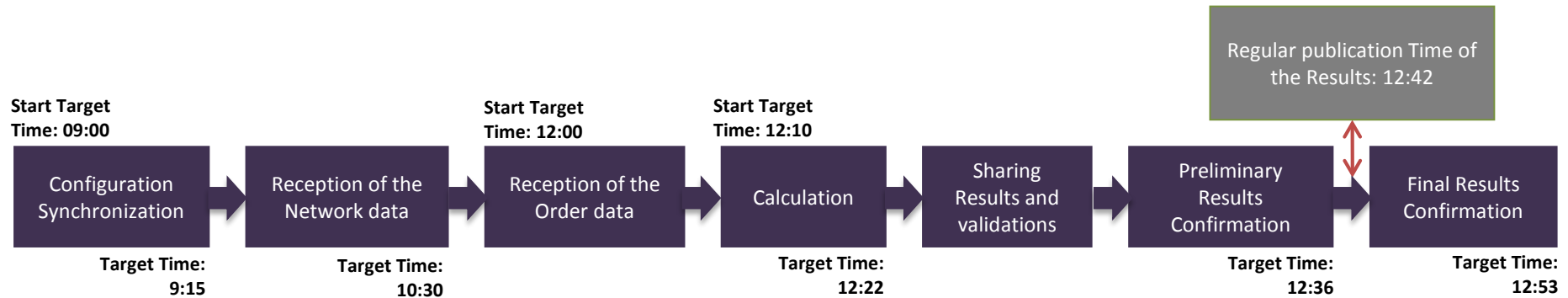
Time to first solution increased by more than seasonal variation since DE/AT split and SEMO integration

DE/AT split



Spread on AT-IT border closed since DE/AT split (Oct and Nov 2019).
Both compared to last month and compared year on year

Statistics - PCR Operational Indicators - Definitions



Network Data

Procedural Target Time for receiving the Network Data (containing Cross Zonal Capacities and Flow Base Matrix) is 10:30. Until 12:10 new versions can be sent (Network Data table only considers reception of last version). At 12:40 (the Partial Decoupling deadline), if a Network Data is still missing, a Partial Decoupling will be declared.

Order Data

The Order Data of all PXs must be validated at 12:10 at the latest. Before 12:10, new versions of Order Data can be sent (Order Data table only considers reception of last version). At 12:40 (the Partial Decoupling deadline), if an Order Data is still missing, a Partial Decoupling will be declared.

Calculation

Calculation starts at 12:10 and in normal situation the process takes 10 minutes at the most. If after that period, no valid solution is found in any PX, an Extension Time of 100 minutes is added automatically. In this situation, calculation will end when a first valid solution is found. Second round of calculation may be run in case of *Max Price / Thresholds / Second Auction* is detected in the first calculation and new data is required to improve the market situation (calculation table only considers the timing of the last calculation run).

Preliminary confirmation

Each PX has to accept or reject the Preliminary Confirmation of the Results. Target Time to have all Preliminary Confirmations is 12:36

Final confirmation

Each PX has the possibility to validate with external parties (TSOs, market participants, etc.) the results from the calculation. Then, each PX has to accept or reject the Final Results Confirmation. Target Time to have all Final Confirmations is 12:53.

Statistics - PCR Operational Indicators (I)

Month	Network Data Reception* (TSO → PX) Average Time	Network Data Reception* (TSO → PX) Minimum Time	Network Data Reception* (TSO → PX) Maximum Time
Oct-17	9:58h	9:54h	11:00h**
Nov-17	10:04h	9:54h	11:39h***
Dec-17	9:58h	9:54h	11:44h****
Jan-18	9:58h	9:54h	10:41h*
Feb-18	9:57h	9:54h	10:31h
Mar-18	10:01h	9:54h	11:18h###
Apr-18	9:58h	9:54h	11:16h####
May-18	9:59h	9:54h	11:26h†
June-18	9:59h	9:55h	11:24h††
July-18	9:57h	9:53h	10:30h
August-18	9:56h	9:50h	10:39h
September-18	9:56h	9:52h	11:16h†††
October-18	9:59h	9:56h	11:33h††††

- (**) ATC delay from a PX
- (***) Two PXs had an issue to send their ATC to the PMB due to an issue on TSO side
- (****) ATC delay from a PX
- (###) Second PX network data file received solving a mismatch
- (####) Second version of ATC received by a PX
- (†) One PX sent its ATC late
- (††) One PX sent its ATC late
- (†††) One PX sent its ATC late
- (††††) a PX sent a new version of Network Data due to mismatch. IC triggered.

Statistics - PCR Operational Indicators (II)

Month	Orderbooks Reception* (PX → PCR) Average Time	Orderbooks Reception* (PX → PCR) Minimum Time	Orderbooks Reception* (PX → PCR) Maximum Time
Oct-17	12:06h	12:04h	12:29h##
Nov-17	12:05h	12:04h	12:10h
Dec-17	12:05h	12:03h	12:22h###
Jan-18	12:05h	12:03h	12:26h*
Feb-18	12:04h	12:03h	12:12h
Mar-18	12:04h	12:03h	12:11h
Apr-18	12:04h	12:03h	12:18h**
May-18	12:05h	12:03h	12:12h***
June-18	12:04h	12:03h	12:38h****
July-18	12:05h	12:03h	12:56h*****
August-18	12:05h	12:03h	12:19h†
September-18	12:04h	12:03h	12:09h
October-18	12:04h	12:02h	12:38h

- (##) A PX had a problem with the sending of the order book to the PMB
- (###) Calculation had to be manually stopped due to Incorrect Order data (Calculation stop and new calculation launched)
- (*) Late reception of Order Book from 2 PXs
- (**) a PX had still not send the order book to the PMB, due to internal IT issues with the local trading systems.
- (***) One PX sent its order book late
- (****) One PX had an issue with its Order Book
- (*****) One PX had an issue with its Order Book
- (†) OBK sent late by a PX
- (††) At the end of the calculation, a PX informed all the PCR PXs about their need to resend their order book. It was agreed to restart the MC Session in order to allow the PX to send again their OBK.

Statistics - PCR Operational Indicators (III)

Month	PCR Calculation* Average Time	PCR Calculation* Minimum Time	PCR Calculation* Maximum Time
Oct-17	10:06 min [‡]	09:59 min	10:16 min [‡]
Nov-17	10:11 min [‡]	09:59 min	10:30 min [‡]
Dec-17	10:08 min [‡]	09:59 min	10:32 min [‡]
Jan- 18	10:10 min	10:00 min	10:30 min [‡]
Feb- 18	10:10 min	09:59 min	10:30 min [‡]
Mar-18	10:07 min	09:59 min	10:32 min [‡]
Apr-18	10:08 min	09:59min	10:28 min [‡]
May-18	10:07 min	09:59 min	10:31 min [‡]
June-18	10:01 min	09:59 min	10:09 min [‡]
July-18	10:00 min	9:59 min	10:09 min [‡]
August-18	10:00 min	9:59 min	10:04 min [‡]
September-18	10:00 min	9:59 min	10:19 min [‡]
October-18	10:00 min	9:59 min	10:03 min [‡]

(‡) Since introduction of E10.1_fix1, Euphemia takes more time to interrupt after time limit

Statistics - PCR Operational Indicators (IV)

Month	Preliminary Result Publication* Average Time	Preliminary Result Publication* Minimum Time	Preliminary Result Publication* Maximum Time
Oct-17	12:43h	12:42h	12:57h‡‡
Nov-17	12:42h	12:42h	12:42h
Dec-17	12:42h	12:42h	12:45h‡‡‡
Jan- 18	12:42h	12:42h	12:47h*
Feb- 18	12:42h	12:42h	12:42h
Mar-18	12:42h	12:42h	12:42h
Apr-18	12:42h	12:42h	12:42h
May-18	12:42h	12:42h	12:42h
June-18	12:43h	12:42h	12:57h**
July-18	12:42h	12:42h	12:56h***
August-18	12:42h	12:42h	12:42h
September-18	12:42h	12:42h	12:42h
October-18	12:42h	12:42h	13:03h****

(‡) The trading system server of a PX had to be relaunched during the session, then normal session with delay

(‡‡) A PX did not send its preliminary confirmation to the PMB

(‡‡‡) Session delayed due to the previous issue

(*) Late reception of Order Book from 2 PXs, then session in minor delay due to this OBK delay issue

(**) Session in Normal mode but with delay due to the Order Book issue from a PX

(***) Session delayed due to Order Book issue

(****) Delay due to the OBK issue of the PX (issue below)

At the end of the calculation, a PX informed all the PCR PXs about their need to resend their order book. It was agreed to restart the MC Session in order to allow the PX to send again their OBK.

Statistics - PCR Operational Indicators (V)

Month	Final Confirmation of PCR results* (PX/TSO → PCR) Average Time	Final Confirmation of PCR results* (PX/TSO → PCR) Minimum Time	Final Confirmation of PCR results* (PX/TSO → PCR) Maximum Time
Oct-17	12:52h	12:51h	13:06h ^{###}
Nov-17	12:51h	12:51h	12:52h
Dec-17	12:52h	12:51h	12:57h ^{####}
Jan- 18	12:51h	12:51h	12:54h
Feb- 18	12:51h	12:51h	12:53h
Mar-18	12:52h	12:51h	12:55h
Apr-18	12:51h	12:51h	12:53h
May-18	12:52h	12:51h	13:19h [*]
June-18	12:52h	12:51h	13:06h ^{**}
July-18	12:52h	12:51h	13:04h
August-18	12:51h	12:51h	12:53h
September-18	12:51h	12:51h	12:52h
October-18	12:52h	12:51h	13:15h ^{***}

- (##) The trading system server of a PX had to be relaunched during the session, then normal session with delay
- (###) Normal session with delay due to the delay of a PX in sending the PC to the PMB
- (####) Session delayed due to the previous issue
- (*) One PX had issues to confirm the results
- (**) Session in Normal mode but with delay due to the Order Book issue from a PX
- (***) Delay due to Order Book issue

Annex: Box plots

